IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A video encoding apparatus for encoding a video image comprising:

a first feature amount computing device configured to compute at least some of a number of motion vectors, distribution, norm size, residual error after motion compensation, and variance of luminance and chrominance for each of time-continuous frames of the video image, each of the frames including at least one object and a background, by analyzing an input video signal representing the video image;

a scene dividing device configured to divide the video image into a plurality of scenes continuous in time in accordance with at least some of a number of motion vectors, distribution, norm size, residual error after motion compensation, and variance of luminance and chrominance, each of the scenes including one or more of the time-continuous frames;

a second feature amount computing device configured to compute an average feature amount for each of the scenes using the ~~feature amount~~ at least some of a number of motion vectors, distribution, norm size, residual error after motion compensation, and variance of luminance and chrominance obtained by the first feature amount computing device;

an encoding parameter generator configured to generate an encoding parameter including at least an optimum frame rate and quantization step size for each of the scenes using the average feature amount; and

an encoder configured to encode the input video signal in accordance with the encoding parameter generated for each of the scenes by the encoding parameter generator.

Claim 2 (Previously Presented): An apparatus according to claim 1, further comprising a scene selector to select the scenes in accordance with operation information

obtained by editing performed by an user and to provide the selected scenes to the encoding parameter generator.

Claim 3 (Previously Presented): An apparatus according to claim 2, further comprising a scene content providing device configured to provide feature of each of the scenes to the user.

Claim 4 (Original): An apparatus according to claim 3, wherein the scene content providing device provides a key-frame of each scene or a thumb nail thereof to the user.

Claim 5 (Previously Presented): An apparatus according to claim 3, wherein the scene content providing device provides a symbol indicating the average feature amount or feature obtained for each scene by the second feature amount computing device to the user.

Claim 6 (Previously Presented): An apparatus according to claim 3, wherein the scene content providing device provides a key-frame of each scene or a thumb nail thereof and a symbol indicating the average feature amount or feature obtained for each scene by the second feature amount computing device to the user.

Claim 7 (Canceled):

Claim 8 (Currently Amended): A video encoding method comprising:

computing at least some of a number of motion vectors, distribution, norm size, residual error after motion compensation, and variance of luminance and chrominance every frame by analyzing an input video signal;

dividing a video image including time-continuous frames each including at least one object and a background into a plurality of scenes in accordance with the at least some of a number of motion vectors, distribution, norm size, residual error after motion compensation, and variance of luminance and chrominance, each of the scenes including one or more of the time-continuous frames:

computing an average feature amount for each of the scenes, using the ~~statistical feature amount~~ at least some of a number of motion vectors, distribution, norm size, residual error after motion compensation, and variance of luminance and chrominance;

generating an encoding parameter including at least an optimum frame rate and quantization step size for each of the scenes, using the average feature amount; and

encoding the input video signal in accordance with the encoding parameter generated for each of the scenes.

Claim 9 (Previously Presented): A method according to claim 8, further comprising selecting the scenes in editing performed by an user to use the selected scenes to generate the encoding parameter.

Claim 10 (Previously Presented): A method according to claim 9, further comprising providing feature of each of the scenes to the user.

Claim 11 (Previously Presented): A method according to claim 10, further comprising providing a key-frame of each scene or a thumb nail thereof to the user.

Claim 12 (Previously Presented): A method according to claim 10, wherein the providing the feature provides a symbol indicating the average feature amount or feature obtained for each scene to the user.

Claim 13 (Previously Presented): A method according to claim 10, wherein the providing the feature provides a key-frame of each scene or a thumb nail thereof and a symbol indicating the average feature amount or feature obtained for each scene to the user.

Claim 14 (Currently Amended): A computer program stored on a computer readable medium, comprising:

instruction means for instructing a computer to compute a at least some of a number of motion vectors, distribution, norm size, residual error after motion compensation, and variance of luminance and chrominance every frame by analyzing an input video signal;

instruction means for instructing the computer to divide a video image including time-continuous frames each of the frames including at least one object and a background into a plurality of scenes in accordance with the at least some of a number of motion vectors, distribution, norm size, residual error after motion compensation, and variance of luminance and chrominance, each of the scenes including one or more of the time-continuous frames;

instruction means for instructing the computer to compute an average feature amount for each of the scenes, using the ~~statistical feature amount~~ at least some of a number of motion vectors, distribution, norm size, residual error after motion compensation, and variance of luminance and chrominance;

instruction means for instructing the computer to generate an encoding parameter including at least an optimum frame rate and quantization step size for each of the scenes, using the average feature amount; and

instruction means for instructing the computer to encode the input video signal in accordance with the encoding parameter generated for each of the scenes.

Claim 15 (Currently Amended): A video encoding apparatus for encoding a video image comprising:

a first feature amount computing device configured to compute a number of motion vectors for each of time-continuous frames of the video image by analyzing an input video signal representing the video image;

a scene dividing device configured to divide the video image into a plurality of scenes continuous in time in accordance with the number of motion vectors, each of the scenes including one or more of the time-continuous frames each including at least one object and a background;

a second feature amount computing device configured to compute an average feature amount for each of the scenes using the ~~feature amount~~ number of motion vectors obtained by the first feature amount computing device;

an encoding parameter generator configured to generate an encoding parameter including at least an optimum frame rate and quantization step size for each of the scenes using the average feature amount; and

an encoder configured to encode the input video signal in accordance with the encoding parameter generated for each of the scenes by the encoding parameter generator.

Claim 16 (Previously Presented): The apparatus according to claim 15, wherein the vectors are distributed in one of (a) a type that almost no motion vector exists in a frame, (b) a type that motion vectors with identical directions and sizes are distributed over the entire frame, (c) a type that a motion vector appears at a specific portion in a frame, (d) a

type that motion vectors are distributed in a radiation manner in a frame, and (e) a type that a large number of motion vectors are present in a frame, and their directions are not uniform.